

What is claimed is:

1. The compound 2-(2-amino-1,6-dihydro-6-oxo-purin-9-yl)methoxy-3-hydroxy-1-propanyl-L-valinate or a pharmaceutically acceptable salt thereof, in the form of its (R)- or (S)-diastereomers, or in the form of mixtures of the two diastereomers.
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2. The compound according to Claim 1 comprising said mixture containing equal amounts of its (R)- and (S)-diastereomers.
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3. The compound according to Claim 1 wherein the pharmaceutically acceptable salt is the hydrochloride.
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4. A compound according to Claim 1 in crystalline form.
5. The compound of Claim 1 which is (R)-2-(2-amino-1,6-dihydro-6-oxo-purin-9-yl)methoxy-3-hydroxy-1-propanyl-L-valinate and its pharmaceutically acceptable salts.
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6. The compound of Claim 1 which is (S)-2-(2-amino-1,6-dihydro-6-oxo-purin-9-yl)methoxy-3-hydroxy-1-propanyl-L-valinate and its pharmaceutically acceptable salts.
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7. A compound according to Claim 5 wherein said salt is the hydrochloride.
8. A compound according to Claim 6 wherein said salt is the hydrochloride.
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9. A pharmaceutical composition comprising a compound according to Claim 1.
10. A pharmaceutical composition according to Claim 9 which includes a pharmaceutically acceptable excipient or carrier.
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11. The composition according to Claim 10 for intravenous administration.
12. The composition according to Claim 10 for oral administration.
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13. The composition according to Claim 10 for topical administration.
14. The composition according to Claim 10 in the form of an intravitreal implant.

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15. A method of treating an animal afflicted with, or at risk for, a viral or related disease which method comprises administering a therapeutically acceptable amount of a compound of Claim 1 to said animal.

5 16. The method of Claim 15 wherein the compound is administered orally.

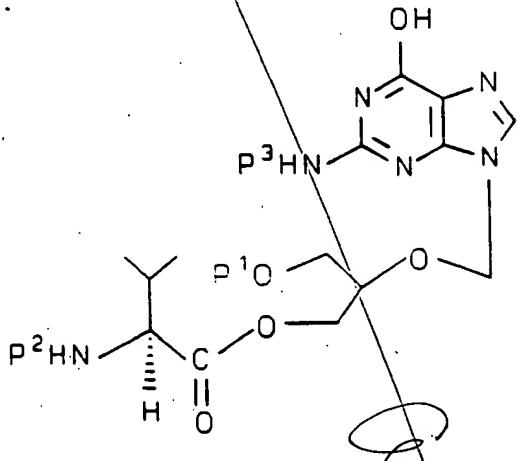
10 17. The method of Claim 15 wherein the compound is administered topically.

15 18. The method of Claim 15 wherein the compound is administered as an intravitreal implant.

15 19. The method of Claim 15 wherein the compound is administered in the form of an injection.

20 20. A process for preparing the compound 2-(2-amino-1,6-dihydro-6-oxo-purin-9-yl)methoxy-3-hydroxy-1-propanyl-L-valinate or a pharmaceutically acceptable salt or diastereomers thereof which process comprises:

(a) removal of an amino- and/or hydroxy-protecting group from a compound with the formula



25 wherein:

30 35 P^1 is a hydroxy-protecting group or hydrogen, P^2 is an amino-protecting group, and P^3 is hydrogen or P^2 ; to afford the compound 2-(2-amino-1,6-dihydro-6-oxo-purin-9-yl)methoxy-3-hydroxy-1-propanyl-L-valinate or a pharmaceutically acceptable salt thereof;

40 (b) conversion of the compound 2-(2-amino-1,6-dihydro-6-oxo-purin-9-yl)methoxy-3-hydroxy-1-propanyl-L-valinate into a pharmaceutically acceptable salt thereof;

(c) esterification of 2-(2-amino-1,6-dihydro-6-oxo-purin-9-

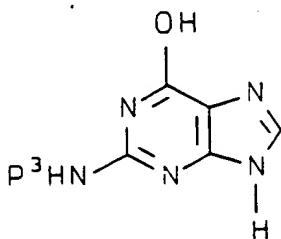
yl)methoxy-1,3-propanediol (ganciclovir) or a salt thereof, with an activated derivative of L-valine;

(d) condensation of an optionally substituted guanine of the formula

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(IV)

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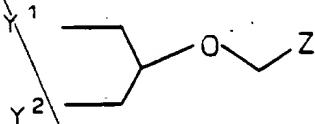


optionally in persilylated form,
wherein:

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P^3 is hydrogen or an amino-protecting group, with an 2-substituted glycerol of the formula

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wherein:

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Y^1 and Y^2 independently are halo, lower acyloxy, lower alkyloxy, or aryl(lower)alkyloxy groups, and Z is a leaving group selected from lower acyloxy, methoxy, isopropoxy, benzyloxy, halo, mesyloxy or tosylaxy; optionally in the presence of a Lewis acid catalyst, to provide the compound 2-(2-amino-1,6-dihydro-6-oxo-purin-9-yl)methoxy-3-hydroxy-1-propanyl-L-valinate; or

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(e) partial hydrolysis of the bis ester 2-(2-amino-1,6-dihydro-6-oxo-purin-9-yl)methoxy-1,3-propanediyl bis (L-valinate) or a salt thereof to afford the monoester 2-(2-amino-1,6-dihydro-6-oxo-purin-9-yl)methoxy-3-hydroxy-1-propanyl-L-valinate or a pharmaceutically acceptable salt thereof; or

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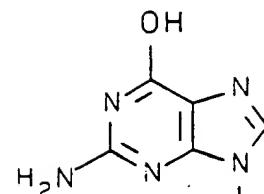
(f) diastereomeric separation of 2-(2-amino-1,6-dihydro-6-oxo-purin-9-yl)methoxy-3-hydroxy-1-propanyl-L-valinate into its (R) and (S) diastereomers.

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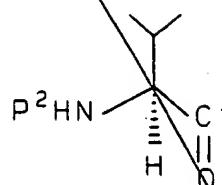
21. The process of Claim 20, wherein the removal of amino- and hydroxy-protecting groups is carried out under acidic conditions.

22. A compound of the formula

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wherein

P^1 is hydrogen or a hydroxy-protecting group and P^2 is an amino-protecting group.

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